

REMARKS/ARGUMENTS

In light of the above amendments and following remarks, reconsideration and withdrawal of the rejections of the application are respectfully requested.

I. STATUS OF THE CLAIMS AND FORMAL MATTERS

Claims 29, 32-36, 44 and 47-55 are pending in this application. Claims 29 and 36 are allowed and claims 32 and 34 are objected to. Claims 33, 35, 44 and 47-55 have been rejected in the Office Action. In this response, claims 44, 52 and 54 have been amended to recite that the instant invention is directed to a large "waterborne, towed" flexible fluid containment vessel for the transportation of cargo. No new subject matter has been added as a result of the amendment to the claims. Support for the amendments can be found in the specification, for example, on page 1, line 14 to page 2, line 22.

Initially, the Examiner is thanked for allowing claims 29 and 36 and indicating that claims 32 and 34 contain allowable subject matter.

Lastly, the Examiner is thanked for granting Applicants a telephone interview. In accordance with M.P.E.P. § 713.04, included is a summary of the interview as understood by the Applicants. The interview occurred on April 19, 2006. Participants in the interview included Examiner Ajay Vasudeva and attorneys for the Applicants, Ronald R. Santucci and Anthony D. Mustillo. The interview was initiated by the Applicants to discuss the rejections in the Office Action dated January 24, 2006. Applicants reiterated their arguments that U.S. Patent No. 6,021,915 to Shimosono et al. ("Shimosono") and U.S. Patent No. 4,055,201 to Fowler et al. ("Fowler") are nonanalogous art and therefore cannot be considered pertinent prior art under 35 U.S.C. § 103. In an attempt to further render Shimosono and Fowler nonanalogous, Applicants' attorneys proposed amending the rejected claims to recite that the instant flexible fluid

containment vessel is a large "waterborne, towed" vessel. Examiner Vasudeva indicated that amending the claims in this manner would probably render Shimozono and Fowler nonanalogous.

II. THE REJECTIONS UNDER 35 U.S.C. § 103(a)

In numbered paragraph 2 of the Action, claims 44 and 51 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 2,997,973 to Hawthorne et al. ("Hawthorne") in view of Shimozono.

In paragraph 3 of the Action, claims 47-50, 54 and 55 are rejected under § 103(a) as allegedly being unpatentable over Hawthorne in view of Fowler.

Lastly, in paragraph 4 of the Action, claims 33, 35, 52 and 53 are rejected under § 103(a) as allegedly being unpatentable over Hawthorne in view of Fowler. The rejections are traversed for at least the following reasons.

As discussed during the telephone interview, independent claims 44, 52 and 54 have been amended to recite, *inter alia*, a "large waterborne, towed flexible fluid containment vessel for the transportation of cargo comprising a fluid or fluidisable material." As amended, the claims positively recite and require the flexible fluid containment vessel ("FFCV") of the instant invention to be a waterborne vessel that is towed through, for example, the ocean. Towing of the large waterborne FFCV of the instant invention can be achieved, for example, by using a tug boat to pull or tow the FFCV. *Instant Application*, page 1, line 30 to page 2, line 22. Since the FFCV of the instant invention is being towed through water, certain design factors needed to be considered, such as the distribution of the towing load and the stability of the FFCV. *Id.* at page 10, lines 20-25. In addition, the FFCV is designed to have a tapered bow and stern in order insure that the FFCV will remain stable during towing, thereby avoiding a towing phenomenon

known as snaking, which can destroy the FFCV. *Id.* at page 10, line 26 to page 11, line 2.

Lastly, the force acting on the FFCV needed to be minimized. *See id.* at page 10, lines 26-27.

Applicants submit that neither the Shimosono nor Fowler structures are used for waterborne transportation of a fluid contained therein and therefore, the above discussed design considerations did not need to be considered in the design of the Shimosono and Fowler structures.

Moreover, it is respectfully pointed out that the preambles for the instant claims are more than a statement of use. In other words, the present claims are directed to and limited large waterborne, towed FFCVs for the transportation of fluids contained therein. This is not a mere intended use. This is a specific article. Without it, the claim would be lacking in meaning.

This situation is analogous to that in *Corning Glass Works v. Sumitomo Electric*, 9 U.S.P.Q.2d 1962, 1966 (Fed.Cir.1989). In that case the court held that the use of the term “optical waveguide” did not merely state a purpose or intended use. Rather, it gave “life and meaning” to the claim and provided a further positive limitation to the invention claimed. The court in making its determination looked to the entire patent to determine and gain an understanding as to what the inventors actually invented and intended to encompass by the claim. The court noted that “[t]o read the claim in light of the specification indiscriminately to cover all types of optical fibers would be divorced from reality.”

Accordingly, it is clear from the claim preambles that the instant invention is directed towards waterborne, towed vessels for the transportation of fluids contained therein and not generally immobile, land-based structures that merely contain a fluid.

As such, Applicants contend that the Shimosono and Fowler references are nonanalogous art to the instant invention and Hawthorne, and therefore cannot be properly applied to reject

Applicants' claims. Applicants' invention is directed to large waterborne, towed fabric FFCVs for the transportation of cargo (fresh water) as well as other fluids having a density less than that of salt water through, for example, the oceans. *Id.* at page 6, lines 4-8. In the instant invention, the FFCVs can have a length of 300 feet or more and a diameter of 40 feet or more. *Id.* at page 6, lines 19-23. Hawthorne is directed to tubular shaped vessels, the size of which are similar to that of barges, for transporting or storing liquids or fluidisable solids. *See Hawthorne*, col. 1, lines 11-19. In Hawthorne, the length of the vessel is greater than 20 times its beam. *Id.* at col. 1, lines 26-27. Therefore, Hawthorne is directed towards large floating structures for ocean transportation.

In contrast, Shimozono is directed to foldable water tanks used to hold water. In general, the diameter of the water tanks range from 1 to 10 meters and the height is from 0.5 to 2.0 meters. *Shimozono*, col. 2, line 65 to col. 3, line 2. Fowler is directed to a tubular shaped fluid-dispensing container for hand holding used to hold and dispense a fluid contained therein. *See Fowler*, col. 2, lines 57-58. When the structure of Fowler is formed into a tubular shape of radial expansibility, the relaxed circumference of the tubular shape is preferably from 1.5 to 12.0 cm. The relaxed length of the tubular shape will generally be from 8.9 to 19.0 cm. When the tubular shape of Fowler is of longitudinal expansibility, the relaxed circumference is preferably from 4.0 to 36.0 cm and the relaxed length is preferably from 1.0 to 9.4 cm. *Id.* at col. 12, lines 22-33.

It is well established that nonanalogous art cannot be considered pertinent prior art under 35 U.S.C. § 103 and therefore cannot be relied upon as a "basis for rejection of an applicant's invention." *See* M.P.E.P. § 2141.01(a) (quoting *In re Oetiker*, 977 F.2d 1443, 1446 (Fed. Cir. 1992)). The determination as to whether a reference is analogous art is two fold. First, it must be decided if the reference is within the field of the inventor's endeavor. If it is not, it must then

be determined whether the reference is "reasonably pertinent to the particular problem with which the inventor was concerned." *In re Oetiker*, 977 F.2d at 1446. The Federal Circuit has held:

A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem.

In re Clay, 966 F.2d 656, 659 (Fed. Cir. 1992).

In the present case, the Shimozono and the Fowler references do not satisfy the above well established test of a reference falling into the category of analogous art. First, Shimozono and Fowler are not within the field of the instant inventors' endeavor. As previously discussed, the instant invention relates to very large waterborne, towed FFCVs used to transport liquids through water and Hawthorne relates to large tubular shaped vessels for the transport of liquids. In contrast, Shimozono relates to small, portable water tanks and Fowler relates to very small tubular shaped fluid dispensing containers.

On page 7, the Action asserts that Shimozono and Fowler are in the same field of endeavor as the instant invention and Hawthorne. The Action further asserts that "scale is generally easily modified by the skilled artisan" and that Shimozono and Fowler "disclose essentially the same structure, a fabric for holding water, on a much smaller scale." *Office Action*, page 7. As such, the Action asserts that they are in the same field of endeavor as the instant invention and Hawthorne. *Id.* In addition, the Action asserts that Shimozono and Hawthorne address the same problem as the instant invention despite their small size, namely how to construct a fabric container for holding water. *Id.*

Applicants respectfully disagree. As discussed above, Shimozono and Fowler do not disclose the same type of structure and are not directed at addressing the same problem as the instant invention. The instant invention is not a land-based "fabric container for holding water." Instead, the instant invention is a waterborne vessel that is towed through, say the oceans for transportation of a fluid contained therein. As such, the design considerations for the instant FFCV (previously discussed) were much different than those of Shimozono and Fowler. Therefore, Shimozono and Fowler are not in the same field of endeavor and they are not directed at addressing the same problem as the instant invention or Hawthorne.

Further evidencing the different fields of invention between the instant invention and Hawthorne and the Shimozono and Fowler references are the USPTO classifications of the references.. See M.P.E.P. § 2141.01(a). In the Office Communication dated September 16, 2002 for the parent application (application serial No. 09/921,617), detailing the restriction requirement, claims 29-36 were classified in class 114. This classification is also confirmed under the Application Data tab on the PAIR system for the instant application. Hawthorne is also classified in class 114. In contrast, Shimozono is classified in classes 220, 383 and 4 and Fowler is classified in classes 139, 57, 66, 150 and 428. The classes are defined as follows:

Class 114 (Applicant's invention and Hawthorne): Ships

Class 383 (Shimozono): Flexible Bags

Class 220 (Shimozono): Receptacles

Class 4 (Shimozono): Baths, Closets, Sinks and Spitoons

Class 139 (Fowler): Textiles: Weaving

Class 57 (Fowler): Textiles: Spinning, Twisting and Twining

Class 66 (Fowler): Textiles: Knitting

Class 150 (Fowler): Purses, Wallets and Protective Covers

Class 428 (Fowler): Stock Material or Miscellaneous Articles

Accordingly, Shimozono and Fowler are neither within the field of the instant inventors' endeavors, nor are they within the field of the Hawthorne reference applied in combination.

Secondly, Shimozono and Fowler are not reasonably pertinent to the particular problem with which the instant inventors were involved, thus failing the second prong of the test. As previously discussed, Shimozono is directed to small portable water tanks and Fowler is directed to very small tubular shaped fluid dispensing containers. On the other hand, the instant invention is directed to the problems associated with waterborne or ocean transportation of liquids using very large FFCVs that are towed. It is clear that the matters with which Shimozono and Fowler deal would not logically have commended itself to the instant inventors' attention in considering the problem solved by the instant invention.

Therefore, as Shimozono and Fowler fail both prongs of the analogous art test, Shimozono and Fowler are nonanalogous art to the instant invention and cannot be properly applied in an obviousness analysis.

Moreover, while the USPTO classification is some evidence of analogy, similarities and differences in structure and function carry more weight. *In re Ellis*, 476 F.2d 1370, 1372 (C.C.P.A. 1973). As previously discussed, the Applicants' invention is directed to the large waterborne, towed FFCVs for the transportation of fluids contained therein through, for example, the oceans. In contrast, neither Shimozono nor Fowler perform a function similar to waterborne, towed ocean transportation of fluids. Instead Shimozono is directed to foldable portable water tanks for use on land and Fowler is directed to hand held fabric fluid dispensing containers. Both structures are extremely smaller in relation to the instant invention. Additionally, neither

structure is designed to be towed through water and therefore their structures are different from the instant invention as well. One example is that the foldable water tank of Shimozono is not a closed structure. As depicted in Figure 4, the water tank has an open top. In contrast, the structure of the Applicants' invention is completely enclosed. Therefore, liquid contained within the instant invention is completely enclosed within the structure and is protected from the surrounding environment. Hence, the differences in structure and function of the cited references are further evidence of nonanalogous between Applicants' invention and Shimozono and Fowler.

For at least the foregoing reasons, it is respectfully submitted that Shimozono and Fowler are nonanalogous to the Applicants' invention and Hawthorne and therefore should not have been relied upon as a basis for rejection of the Applicants' invention. Consequently, reconsideration and withdrawal of the § 103(a) rejections of claims 33, 35, 44 and 47-55 are respectfully requested.

Statements appearing above with respect to the disclosures in the cited references represent the present opinions of the Applicants' undersigned attorney and, in the event that the Examiner disagrees with any such opinions, it is respectfully requested that the Examiner specifically indicate those portions of the respective reference providing the basis for a contrary view.

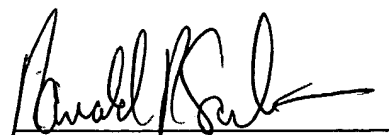
CONCLUSION

In view of the foregoing, Applicants believe that all of the claims in this application are patentable over the prior art, and an early and favorable consideration thereof is solicited.

Please charge any fees incurred by reason of this response and not paid herewith to Deposit Account No. 50-0320.

Respectfully submitted,
FROMMER LAWRENCE & HAUG LLP

By:

A handwritten signature in black ink, appearing to read "Ronald R. Santucci", written over a horizontal line.

Ronald R. Santucci

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